

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-13. (canceled)

14. (currently amended) A method for operating a network interface suitable for receiving frame data from a network via a media interface, the network interface comprising a media access control providing a connection to the media interface, a buffer manager operationally coupled with the media access controller control to receive any of the frame data that are passed to the buffer manager by the media access control, and a memory operationally coupled with the buffer manager, wherein the memory includes a receive buffer memory having a plurality of segments, and the media access control is configured to perform a filtering operation on incoming frame data from the media interface to determine whether to accept the incoming frame data, said method comprising the steps of:

receiving first frame data from the network at the media access control, passing the first frame data from the media interface to the buffer manager if the filtering operation performed on the first frame data by the media access control passes results in a determination to accept said first frame data, receiving second frame data from the network at the media access control, and passing the second frame data from the media interface to the buffer manager if the filtering operation performed on the second frame data by the media access control passes results in a determination to accept said second frame data;

writing the first frame data from the buffer manager to a first segment of the receive buffer memory;

writing the second frame data from the buffer manager to a second segment of the receive buffer memory; and

reading the first frame data from the first segment of the receive buffer memory simultaneous to the step of writing the second frame data.

15. (original) The method of claim 14, wherein the step of receiving first and second frame data further comprises receiving a plurality of words for each of the first and second frame data.

16. (currently amended) The method of claim 15, wherein the step steps of writing the frame data further comprise writing the plurality of words to sequential addresses within the first and second segments.

17. (original) The method of claim 14, wherein the step of reading the first frame data comprises reading a plurality of words from sequential addresses within the first segment.

18. (original) The method of claim 14, further comprising the step of generating an overflow signal when the first frame data exceeds the capacity of the first memory segment.

19. (original) The method of claim 18, wherein the step of writing the first frame data comprises writing only a first portion of the first frame data to the first segment.

20. (original) The method of claim 14, further comprising the steps of:
receiving additional frame data for a plurality of frames; and
writing the additional frame data to memory segments in the buffer memory only if the memory segments have been read.

21. (original) The method of claim 20, further comprising the step of generating a lost packet signal if all of the plurality of segments contain unread frame data.

22-45. (canceled)
